Remarks

Claims 1 through 22 and 26 are still pending in the application.
Claim 1, 4, 7-11, 17-22 and 26 have been amended.

Support for amendments

Support for the amendments can be found in Figs. 94-95 and § [2534]-[2537] (page 101).

Claim rejections-35 USC § 101

Claims 19,20 stand rejected under 35 U.S.C. 101. The amendment to claim 19 and 20 is believed to traverse the objection raised.

Claim rejections-35 USC § 103

Claims 1-22,26 stand rejected under 35 U.S.C. 103(a) in view of the teaching of Fellman et al (US 6 246 702) and Woods (US 6 748 451). In particular, the Final Office Action asserts that, although Fellman does not teach that the communication cycle is initiated by an event, Woods teaches a method where a communication cycle is initiated by an event and that it would be obvious for one of ordinary skilled in the art to combine the teachings of Fellman and Woods. The rejection is respectfully traversed because one skilled in the art would not, and in fact could not, combine the teachings of Fellman and Woods to arrive at the subject matter recited in the claims as amended for the following reasons.

In particular, neither Fellman nor Woods discloses a feature corresponding to a "the communication system having a time triggered communication mode and an event triggered communication mode" as

recited in claim 1. Accordingly, if for the sake of argument one would assume that a skilled person would combine the teachings of Fellman and Woods, the combined teachings do not, and in fact cannot, result in a method with features corresponding to those recited in claim 1.

As stated in the Final Office Action, Fellman discloses a system in which at regular intervals dedicated time-slots are defined during which real-time traffic may be transmitted. More specifically, Fellman discloses a system in which a 'frame of time' includes a number of phases, each phase being assigned to a specific device adapter (Fellman column 5 lines 60-61). During the assigned phase that specific device adapter is allowed to transmit data (Fellman column 5 lines 62-65). The 'frame of time' is repeated cyclically (Fellman: column 5 lines 54-56). Thus, Fellman discloses a system in which the start of a communication cycle is fixed in time and accordingly, the communication cycle is triggered in time. Fellman does not disclose that the system has multiple, different communication modes. Accordingly, Fellman does not, and in fact cannot disclose that the communication system has 'a time triggered communication mode' and 'an event triggered communication mode" as recited in claim 1.

In the Final Office Action, it is asserted that Woods discloses a communication cycle initiated by an event. Besides that, as explained below, Woods does not disclose a communication cycle initiated by an event but a time initiated communication cycle, Woods does not disclose that the system has multiple communication modes. Accordingly, Woods does not disclose the feature of a "communication system having a time triggered communication mode and an event triggered communication mode" as recited in claim 1.

Thus, both Fellman and Woods fail to disclose a communication system with multiple communication modes. Accordingly, Fellman and Woods do

not disclose a "communication system having a time triggered communication mode and an event triggered communication mode" as recited in claim 1. In fact, Fellman and Woods cannot disclose such a communication because this necessarily implies that they would disclose multiple communication modes. Accordingly, the combined teachings of Fellman and Woods do not and cannot result in a method with feature corresponding to those recited in amended claim 1. Accordingly, the subject matter of claim 1 is non-obvious over the combination of Fellman and Woods.

Independent claims 21 and 26 recite features corresponding to those of claim 1 and are therefore non-obvious as well. Claims 2-20 and 22 are dependent claims referring to one of the independent claims, and for that matter are non-obvious as well.

In addition to the reasons explained above, it is observed that neither Woods nor Fellman disclose a 'communication cycle initiated by an event' as recited in claim 1. Accordingly, the combined teachings of Fellman and Woods do not and cannot result in a method with a 'communication cycle initiated by an event' as recited in claim 1. The subject matter of claim 1 is therefore non-obvious over the combination of Fellman and Woods.

In the Final Office Action, it is asserted that Woods discloses a communication cycle initiated by an event. To support this assertion, the following phrase in Woods is quoted in the Final Office Action: "(...) communication is established based on time deterministic tasks being performed (emphasis added)". However, the phrase has been erroneously interpreted, out of context and inconsistent with the rest of the disclosure of Woods, as meaning that: the communication is established as a reaction to the time deterministic task being performed, i.e. established 'in response' to instead of 'based on'. The correct interpretation of the phrase, consistent with the rest of the disclosure of

Woods (a prior art reference must be considered in its entirety, see MPEP §2141.02), is that the communication consists of the execution of time deterministic tasks (i.e. tasks performed at a predetermined point in time). Thus, Woods does not disclose a communication cycle initiated by an event but a time initiated communication cycle.

Woods discloses that a system uses a centralized scheduling of cooperatively performed tasks (column 3 lines 26-28). The system includes a plurality of nodes which can communicate with each other. A time-based schedule of communications is defined and each communication is initiated at the time defined in the schedule (see column 35 lines 35-36, column 12 lines 11-13). Thus, the respective task is not initiated by an event but by the mere arrival at the point in time at which the task is scheduled. Accordingly, the communication cycle is not triggered by an event.

Referring to the assertion in the Office Action that the event table disclosed in Woods is to be considered as an event, it is observed that the event table is not an event, but a table which prescribes the time a member node has to perform a task, see e.g. Fig. 6.

Woods discloses that a request list 113,115 of communications is generated based on the tasks required from the member nodes 107,10. The request list is transmitted to the master scheduler 106 (column 7 lines 56-59). The master scheduler 106 combines the request lists into a communication schedule represented in the master event table 112. It is observed that the master event table is not an event itself but a table which prescribes the time a member node has to perform a task (see column 12 lines 64-66). As shown with field 612 in Fig. 6, the master event table 112 contains the scheduled start time of the scheduled communication. Thus, the communication schedule is part of the time-based tasks.

As described at e.g. column 7 lines 49-50, the member nodes receive an event table 114,116 from a master scheduler 106. It is observed that the event table 114,116 is not an event but a table which prescribes the time a member node has to perform a task (see column 8 lines 1-3 and Fig. 6. In Fig. 6, the master event table 112 is broken into sections applicable to each member node to be included in the respective local event table 114,116). Thus the respective task is not initiated by an event but by the mere arrival at the time the task is scheduled in the event table. Accordingly, the member nodes will execute the tasks, which include the communication tasks, listed in the event table at the time defined in the event table. Accordingly, the communication cycle is a time initiated communication cycle and not a communication cycle initiated by an event.

Thus, neither Woods nor Fellman disclose a 'communication cycle initiated by an event' as recited in claim 1. Therefore, the combination of Fellman and Woods cannot result in a method with a 'communication cycle initiated by an event' as recited in claim 1. Accordingly, claim 1 is not obvious to one skilled in the art.

Independent claims 21 and 26 recite features corresponding to those of claim 1 and for that matter are non-obvious as well. Claims 2-20 and 22 are dependent claims referring to one of the independent claims, and for that matter are non-obvious as well.

Because of the above, it is submitted that the application is in condition for allowance and accordingly, the Examiner is cordially invited to issue a notification of allowance.

No new matter has been added in this amendment.

Respectfully submitted,

Paul Vincent

Dr. Paul Vincent

Registration number 37,461

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Date

Dreiss, Fuhlendorf, Steimle & Becker
Patentanwälte
Postfach 10 37 62
D-70032 Stuttgart
Federal Republic of Germany
Telephone: ++49/711-24 89 38-0
Fax: ++49/711-24 89 38-99